

IN THE CLAIMS

Amend the claims as indicated below.

Claims 1-19 (canceled).

1        20. (currently amended) A GPS receiver, comprising:  
2        a first GPS antenna coupled to a digital memory, the digital memory storing first  
3 digitized signals obtained through the first GPS antenna;  
4        a second GPS antenna coupled to the digital memory, the digital memory storing second  
5 digitized signals obtained through the second GPS antenna;  
6        a digital processor coupled to the digital memory, the digital processor processing the  
7 first digitized signals after being stored in the digital memory to provide first position  
8 information and processing the second digitized signals after being stored in the digital memory  
9 to provide second position information;  
10       a receiver, including data detection circuitry configured to decode data encoded upon a  
11 spread spectrum modulated signal ~~received from the GPS~~ using a matched filter residing within  
12 the receiver, the data being demarcated into successive data epochs; and  
13       wherein the matched filter decodes periodic phase shift data encoded upon the signal by  
14 phase shifts of the data epochs.

Claims 21-27 (canceled).

1        28. (original) A method of tracking a remote object comprising the steps of:  
2        fitting a remote object with a positioning sensor configured to receive and store  
3 positioning information when the remote object is in a fix position;  
4        positioning the remote object in a fix position such that the positioning sensor is capable  
5 of detecting an activation signal;  
6        receiving and storing a predetermined amount of data in the positioning sensor, the data  
7 comprising position information;  
8        processing the data to determine the location of the fix position;

9            decoding data encoded upon a signal using a matched filter, the data being demarcated  
10 into successive data epochs; and  
11            decoding periodic phase shift data encoded upon the signal by phase shifts of the data  
12 epochs using the matched filter.

Claim 29 (canceled).

1            30. (original) A computer readable medium containing an executable computer  
2 program for use in a digital processing system, the executable computer program when  
3 executed in the digital processing system causing the digital processing system to perform the  
4 steps of:  
5            performing a plurality of convolutions on a corresponding plurality of blocks of sampled  
6 GPS signals to provide a plurality of corresponding results of each convolution;  
7            summing a plurality of mathematical representations of the plurality of corresponding  
8 results to obtain a first position information;  
9            decoding data encoded upon a signal using a matched filter, the data being demarcated  
10 into successive data epochs; and  
11            decoding periodic phase shift data encoded upon the signal by phase shifts of the data  
12 epochs using the matched filter.

Claims 31-36 (canceled).